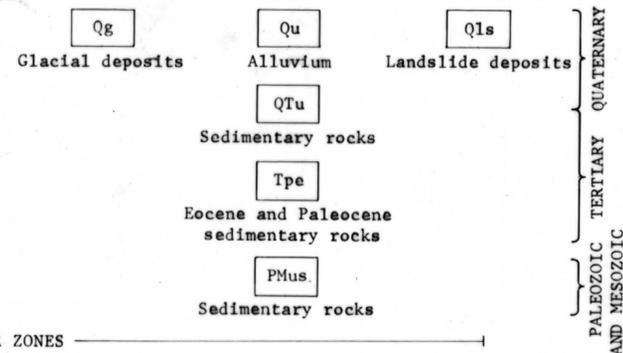


EXPLANATION

U.S. Geological Survey  
OPEN FILE REPORT  
This map is preliminary and has not been edited or reviewed for conformity with Geological Survey standards or nomenclature.

75-85 204  
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OPEN-FILE REPORT  
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PLATE I  
SHEET 2 OF 2



SOUTH OF THE MAIN SHEAR ZONES

pCem pCeb  
Cataclastic Rocks  
pCem, cataclastic gneiss with granite layers  
pCeb, cataclastic biotite augen gneiss

pCpeg  
Pegmatite  
pCg  
Granite and quartz monzonite

Foliated, clearly cross-cutting where related to mafic igneous rock; contacts with other rock types conformable and locally gradational. Unit probably includes rocks of different ages, but preliminary Rb/Sr age for one body in the Medicine Bow Mountains, 1.7±0.6 b.y. (Hills and others, 1968)

pCqm

Quartz monzonite  
Well foliated; conformable and locally gradational contacts with other rock types

pCm pCmn pCmg pCmog pCmdb pCma pCmqg  
Mafic igneous rocks  
Rocks probably of different ages  
pCm, undivided  
pCmg, gabbro  
pCmog, olivine gabbro  
pCma, amphibolite  
pCmoa, amphibolite; may include ortho- and para-amphibolite

pCqd

Quartz diorite  
Well-foliated; conformable contacts, locally cross cutting and locally gradational; inclusions common

pChb pCmv pCms pCqfgn

Metasedimentary and metavolcanic rocks  
pChb, hornblende gneiss and amphibolite; locally interlayered with felsic gneisses, calc-schist, quartzite, and marble  
pCmv, hornblende gneiss, felsic gneiss, and schist; locally textures and structure in rocks suggest those of volcanic rocks; conglomerate present in local areas of the Sierra Madre  
pCms, hornblende gneiss, felsic gneiss, feldspathic quartzite, calc-schist, interlayered with one another  
pCqfgn, quartzo-feldspathic gneiss; locally interlayered with hornblende gneiss and related rocks; locally massive; unit may include igneous rocks

SEDIMENTARY ROCKS IN SIERRA MADRE

NORTH OF THE MAIN SHEAR ZONES  
IGNEOUS ROCKS

pCm pCmn pCmg pCmog pCmdb pCma pCmqg  
Mafic igneous rocks  
Rocks of different ages; most large bodies younger than metasedimentary rocks  
pCm, undivided  
pCmn, norite  
pCmg, gabbro  
pCmog, olivine gabbro  
pCmdb, diabase  
pCma, amphibolite  
pCmqg, quartz gabbro

pCq pCmvs pCtllg pCls pCph

Metasedimentary and metavolcanic rocks  
pCq, quartzite, slate, and phyllite  
pCmvs, metavolcanic and metasedimentary rocks  
pCtllg, tilloid  
pCls, metalimestone, calc-schist, and graphitic schist  
pCph, slate and phyllite

pCogn  
Gneiss

pCg  
Granite and quartz monzonite  
Foliated; contacts conformable, locally gradational, and locally cross-cutting. Rb/Sr whole rock primary isochron 2.5 b.y. (Hills and others, 1968)

SEDIMENTARY ROCKS IN MEDICINE BOW MOUNTAINS

pCf

French Slate<sup>1</sup>

pEt

Towner Greenstone<sup>1</sup>

pCnd pCns

Nash Formation<sup>1</sup>  
pCnd, dolomite  
pCns, phyllite

pCsl

Sugarloaf Quartzite<sup>1</sup>

pCl

Lookout Schist<sup>1</sup>  
Rb/Sr whole rock, metamorphic isochron 1.7 b.y. (Hills and others, 1968)

pCmp

Medicine Peak Quartzite<sup>1</sup>

pCh

Heart Formation<sup>1</sup>

pChs

Headquarters Schist<sup>1</sup>

pEdlq pEdlp pEdlmv pEdlc

Deep Lake Formation  
pEdlq, quartzite  
pEdlp, phyllite  
pEdlmv, metavolcanic and metasedimentary rock  
pEdlc, conglomerate

pCbgn pCogn

Gneiss  
pCbgn, biotite gneiss  
pCogn, quartzo-feldspathic gneiss; rare interlayers of quartzite and hornblende gneiss. Rb/Sr whole rock primary or metamorphic isochron 2.5 b.y. (Hills and others, 1968)

<sup>1</sup>Blackwelder (1926); Houston (1968)

Contact  
Dashed where indefinite

Fault  
Dashed where indefinite

Shear zone

Strike and direction of dip of bedding

Vertical bedding

Strike and direction of dip of foliation

Vertical foliation